CITY OF NEWPORT

TASK ORDER NO. 9
TO ENGINEERING SERVICES AGREEMENT
FOR GEOTECIIINICAL ENGINEERING SERVICES
PROJECT: NYE BEACH PUMP STATION SCREEN AND GRINDER

This TASK ORDER NO. 9 to the Engineering Services Agreement dated Aug. 29, 2011, hereinafter called Agreement, between the City of Newport, (CITY), and Foundation Engineering, Inc., (ENGINEER).

A. SCOPE OF SERVICES

CITY agrees to utilize the services of ENGINEER and ENGINEER agrees to perform geotechnical engineering services as defined within the scope of work.

This PROJECT will include the following:

1. (refer to attached FEI Proposal 2161034 dated March 31, 2016).

B. CITY'S RESPONSIBILITIES

CITY to provide ENGINEER with the following information:

1. CITY shall assign appropriate reviewers to the project and compile and provide a single consolidated, coordinated, legible, and internally consistent copy of written review comments to Consultant for all draft documents and work products, as appropriate.

2. CITY shall provide timely review of submitted products (2-week turnaround), as appropriate.

C. COMPENSATION

1. CITY shall pay ENGINEER according to the fee schedule set forth in Exhibit A to the Engineering Services Agreement.

2. Services provided under this Task Order shall not exceed thirteen thousand six hundred and twenty-five dollars ($13,625).

D. MISCELLANEOUS

All terms and conditions of the Engineering Services Agreement apply to this Task Order as though fully set forth therein. In the event of a conflict between this Task Order and the Engineering Services Agreement, the terms of this Task Order shall apply.

The parties do mutually agree to all mutual covenants and agreements contained within this Task Order No. 9.

CITY OF NEWPORT

By: _____

Title: City Manager

Date: 4-4-16

Foundation Engineering, Inc.

By: _____

Title: President

Date: 3/31/16

Foundation Engineering, Inc.
Professional Geotechnical Services

Jayson Buchholz, P.E.
Senior Project Manager
City of Newport
169 SW Coast Hwy.
Newport, Oregon 97365

March 31, 2016

Nye Beach Pump Station
Proposal for Geotechnical Services
Newport, Oregon

Proposal 161040

Dear Mr. Buchholz:

Please consider this letter as our proposal to provide the requested geotechnical services for the above-referenced project.

BACKGROUND

The City of Newport (City) plans to expand an existing pump station at Nye Beach in Newport, Oregon. The improvements include adding a new ±10-foot deep wet well. Two alternative wet well locations have been identified. One location is in the parking lot north of the Nye Beach pump station. The other location is closer to the pump station.

The City is the project owner and Brown and Caldwell (B&C) is the principal design consultant. The City has requested Foundation Engineering, Inc. provide a proposal to complete a geotechnical investigation for the project. Details of our proposed scope of work, estimated costs, and schedule are summarized below.

PROPOSED SCOPE OF WORK

Subsurface Investigation

The field exploration will consist of drilling one boring near each of the proposed alternative wet well locations. BH-1 will be located on the sidewalk in the parking lot. BH-2 will be located on NW Beach Drive, immediately west of the existing pump station.

A review of well logs and our previous work in the area suggests the site is underlain by sand. The well logs also indicate relatively shallow ground water is present. Based on the anticipated subsurface profile and the proposed depth of the wet well, we plan to drill each boring to a nominal depth of ±30 feet. The actual depths may be adjusted in the field based on subsurface conditions encountered. Soil samples will be obtained at 2.5-foot intervals using a split-spoon sampler, as part of the Standard Penetration Test (SPT). The samples will be retained for possible laboratory testing.

We anticipate ground water will be a key geotechnical issue. The use of mud-rotary drilling methods will preclude accurate ground water measurement in the boring at the time of drilling. Therefore, we plan to install a 1-inch diameter, PVC standpipe piezometer in BH-1 to allow ground water levels to be measured. The top of the piezometer will be protected by a flush-mounted monument set in concrete. We propose to drill this boring in the sidewalk so the piezometer monument will be easily accessible. We will read the ground water level in the piezometer at the time of installation. We assume the City will take subsequent readings to document seasonal (or tidal) fluctuations in ground water elevations.

No installations are planned in BH-2. This boring will be abandoned in accordance with Oregon Water Resources Department guidelines. The borehole will be backfilled with bentonite chips, hydrated in place. The backfill will be capped with crushed rock and the pavement will be patched with Portland cement concrete. It should be understood the concrete patch will not match the existing colored brick pavement.

BH-1 will be located in the parking lot. We have assumed the City will provide access for this exploration by blocking off parking stalls at the borehole location the day of the exploration. Therefore, we have assumed no flaggers are required and traffic control will be limited to signs, cones and caution tape (as needed) to designate the work area.

BH-2 will be located on NW Beach Drive, immediately west of the existing pump station. The narrow street and light poles and bollards that project out into the street will not allow vehicles to pass by the drill rig. Therefore, we plan to close a section of the street and the south-central parking lot entrance. Traffic will still be able to pass through the parking lot entrances to the east and west of the work area. We will provide Road Work Ahead signs and cones, but we assume the City will provide any additional signs or barricades required for the closure. We will prepare a Right-Of-Way (ROW) permit application for this work.

Laboratory Testing

The laboratory testing will include natural water contents, percent fines and/or Atterberg limits tests on selected samples to classify the foundation soils and estimate their overall engineering properties.

Engineering Report

We will summarize our findings in an engineering letter report. The report will include a description of our work, a discussion of the site conditions, and recommendations for site preparation and foundation design and construction. The report will also include boring logs summarizing the subsurface conditions, the laboratory test results, and the preliminary ground water measurement. We assume the City will provide additional ground water level measurements. We assume a site-specific seismic hazard study will not be required.

We anticipate the report will address the following:

- Site preparation
  - removal/mitigation of fill and/or unsuitable soil
  - subgrade preparation, compaction and stabilization
  - construction access and wet weather construction (if required)

- Foundation design
  - allowable bearing pressures
  - settlement (total and differential)
  - overexcavation and placement of structural fill (if required)

- Below-grade walls and shoring requirements
  - lateral earth pressures (temporary and permanent)
  - backfill

- Ground water considerations
  - ground water levels
  - dewatering considerations, including an estimated flow rate range

- Seismic Design
  - appropriate IBC/OSSC response spectrum
  - evaluation of liquefaction hazard

Additional Consultation

We have included costs for up to 10 hours of consultation by a Senior Engineer to assist in the review of plans and specifications.

ESTIMATED COSTS

Table 1 provides a breakdown in the estimated costs for the proposed scope of work. These costs are based on our normal hourly rates.

Table 1. Estimated Costs

Item	Estimated Costs
Field exploration and sampling	$2,415
Laboratory testing	$480
Engineering analysis and memorandum preparation	$4,325
Additional consultation	$1,480
Foundation Engineering Subtotal	$8,700
Drilling subcontractor	$4,925
TOTAL	$13,625

These totals represent our best estimate of the project costs. We will notify you immediately following the field work in the event we encounter unanticipated soil conditions that would require modifying our proposed scope of work.

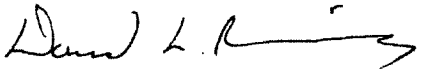
SCHEDULE

Drilling is scheduled for April 4. We expect the subsurface exploration will be completed with one day on site. An additional three weeks will be required for the laboratory testing, engineering analysis and report preparation. We will provide interim information to you as soon as it becomes available. Our first task, upon authorization to proceed, will be to locate underground utilities and coordinate the field exploration.

We appreciate the opportunity to submit this proposal and look forward to the possibility of working with you on this project. Please do not hesitate to call if you have any questions regarding the proposed scope of work, estimated costs, or schedule.

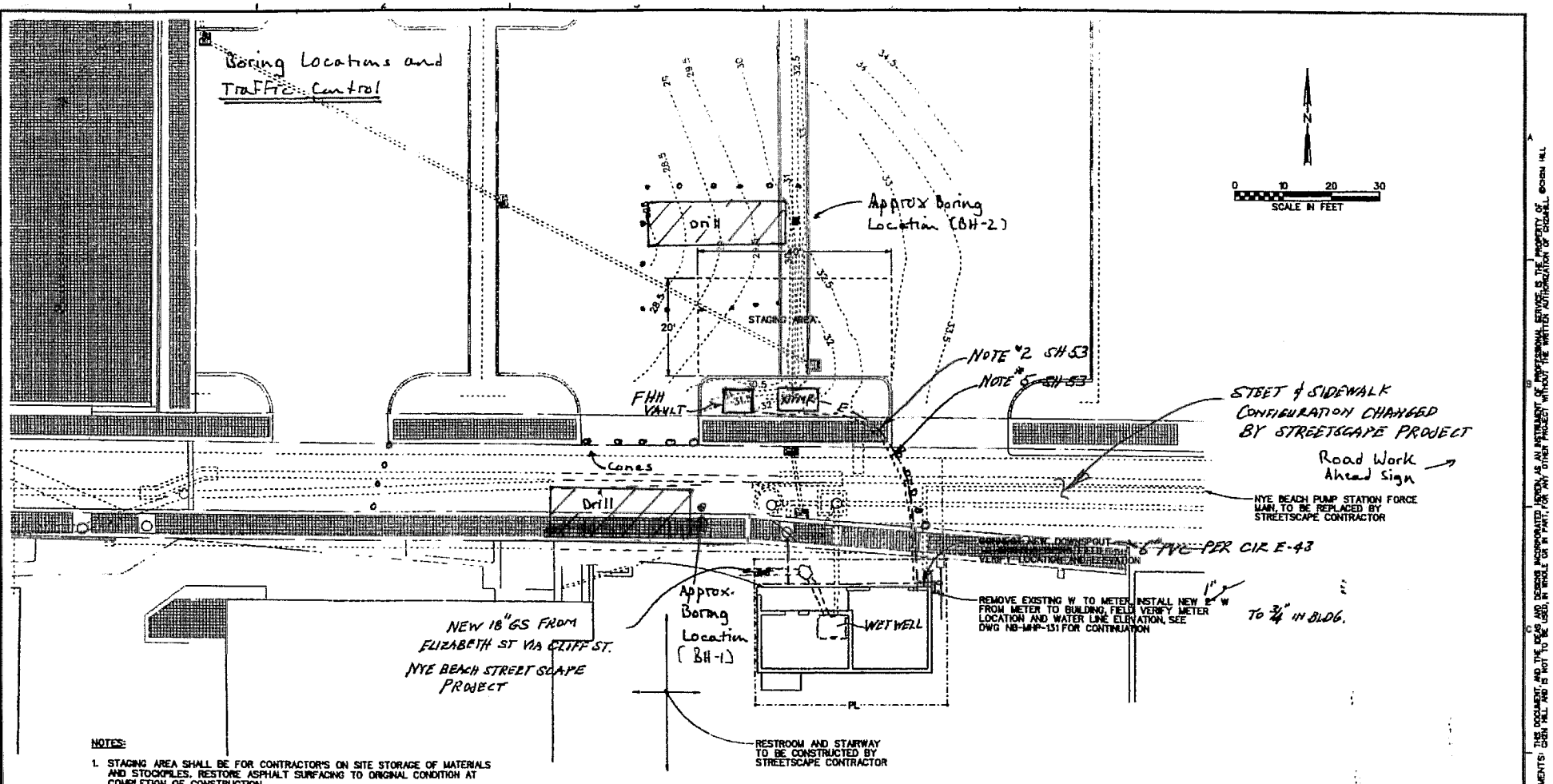
Sincerely,

FOUNDATION ENGINEERING, INC.



David L. Running, P.E., G.E.
Senior Engineer


Proposed Boring Locations
Street Closure
NW Beach Dr
BH-1
BH-2
© 2016 Google
Image © 2016 DigitalGlobe
Google earth
Taft Point
1994
Imagery Date: 5/24/2012 lat 44.639076° lon -124.061616° elev 39 ft eye alt 524 ft



NOTES:

1. STAGING AREA SHALL BE FOR CONTRACTOR'S ON SITE STORAGE OF MATERIALS AND STOCKPILES. RESTORE ASPHALT SURFACING TO ORIGINAL CONDITION AT COMPLETION OF CONSTRUCTION.

DLR 3/31/16

DSGN JA BOOTH DR LG MACNEIL CHK JK FULLER APVD RD BROOKEN JK FULLER	NO.	DATE	Record Dwg. (See Statement on Sheet No. 1)	BY	APVD	VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	FULLER & MORRIS Engineering, Inc.	CH2MHILL	CITY OF NEWPORT, OREGON 2-SBWWTP-01 CONVEYANCE PIPELINES & PUMP STATIONS	NYE BEACH PUMP STATION CIVIL SITE PLAN	SHEET 44 DWG NB-C-131 DATE APRIL 2001 PROJ 150634

FILENAME: npnbc131.dgn PLOT DATE: 24-APR-2001 PLOT TIME: 13:18:49